

REMARKS

Claims 1-15 and 17-26 are pending. Claims 1, 2 and 21 are amended, claim 16 is canceled and claims 23-26 are added with this response. Reconsideration of the application is respectfully requested based on the following remarks.

I. REJECTION OF CLAIMS 1- 22 UNDER 35 U.S.C. § 101

Claims 1-22 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Withdrawal of the rejection is respectfully requested for at least the following reasons.

Regarding Section 101, “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” OG Date: 22 November 2005.

i. Practical Application that produces a Useful, Concrete, and Tangible Result.

Independent Claim 1 has been amended to recite a *high speed add rotate add system used for security processing of data communications in computer networks, the system comprising: an internet protocol security (IPsec) module operable to process the data communications within the computer network utilizing a security processing protocol,...wherein the add rotate add (ARA) result is output to the IPsec module for use in security processing operations.*

Clearly, a **practical application** area (*security processing of data communications*) and context (*in computer networks*) are now thoroughly identified in claim 1, and a **useful, tangible and concrete result** (*the ARA result is output to the IPsec module for use in security processing operations*) is also highlighted to comply with the Section 101 guidelines.

In particular, the practical application of this **fast add rotate add system** of claim 1, **for security processing of data communications in computer networks** and the **outputted result**, when viewed in the context of the present invention, is described in the specification on page 50, line 30 thru page 51 line 2, for example, describing that

during information (data) packet processing and destination address decoding, for example, *it will be appreciated that the IPsec module 124, and more particularly the RX IPsec processor 150, EX IPsec processor 174a and TX IPsec processor 174b, may implement add, rotate, add (ARA) operations, such as in executing HMAC-MD5-95 algorithms*, for example.

Independent Claim 21 has also been amended to recite *a method of performing a fast add rotate add operation in a computer network using a security processing protocol, an internet protocol security (IPsec) module, and an add rotate adder...and outputting the ARA result to the IPsec module for use in security processing operations.*

The exemplary arrangement is discussed and described in the present invention, wherein the **useful, concrete and tangible result** of the method is provided in the preamble (**fast add rotate add operation**) and in the last method step which recites *performing a rotation operation (e.g., 1310 of Fig. 13) on the output result of the carry select propagating adder (e.g., 1314) according to the shift control signal (e.g., CS) and outputting the rotated result* (e.g., OUT 1315) *thereof to the IPsec module for use in security processing operations.* The amendment to claim 21 further identifies an exemplary **application** for the **ARA result** (*in the IPsec module for use in security processing operations*) as well as an application context area (*in computer networks*).

Again, the practical application of this **fast add rotate add outputted result** of the method of claim 21, when viewed in the context of the present invention, is described in the specification on page 50, line 30 thru page 51 line 2, for example, as described above.

ii. Claims 1 and 21 are useful.

Clearly, the output of an **add rotate add operation** provides a data value that is *useful* as an *output result*, and/or as an input in further data operations such as *security processing operations* within an *IPsec module*. This result of the add rotate add operation is clearly (i) specific, (ii) substantial, and (iii) credible.

iii. *Claims 1 and 21 entail the transformation of input data.*

Even if the practical application that produces a useful, tangible, and concrete result, were not achieved, it is respectfully submitted that the independent claims herein provide a result based on the **transformation** of the **first, second and third data inputs** together with the **shift control signal** (e.g., of a data packet) into the single **ARA result** (e.g., OUT 1315) useful *for security processing of data communications in computer networks*, by **summing, decoding, and manipulating data**, as recited in both independent claims to accomplish this transformation.

iv. *Claims 1 and 21 set forth a practical application to produce a real-world tangible result.*

As indicated in the Section 101 guidelines, one test of a **tangible result**, is that “tangible” is the opposite of “abstract”. Claims 1 and 21 are *directed to a practical application producing a real-world result*, as the ARA data result provides a real-world data pattern, 1 and 0 data pattern, or a measurable voltage pattern in the ARA output result (e.g., OUT 1315) for the data communications. The voltages of such a data pattern are not abstract, as they can actually be measured with real-world instruments.

v. *Claims 1 and 21 are directed to a practical application to produce a real-world concrete result.*

As indicated in the Section 101 guidelines, a test of a **concrete result** is whether a “**repeatable or predictable**” **result** can be achieved by the claim invention. Claims 1 and 21 provide the ARA data result (e.g., OUT 1315) as a data pattern, 1 and 0 data pattern, or a voltage pattern, for example, that is **absolutely repeatable and absolutely predictable** as is required and expected of data communications in computer networks, and is also well known by those skilled in the art.

This practical application of this improved or **fast add rotate add outputted result** is further contrasted to a prior method in the specification on page 51, lines 24-27, for example, stating that the typical ARA function method “*requires the two summation steps to be performed separately, which can cause processing to take longer than desired, particularly when many calculation have to be performed, such as where large amounts of data are transmitted and/or received, for example*”.

By contrast to prior slower methods, the practical application of this **fast add rotate add outputted result** of the method of claim 21, in the context of Fig. 13, is also stated in the specification on page 51, line 30 thru page 52 line 2, for example, stating that of the ARA function: *In particular, the arrangement (e.g., 1300 of Fig. 13) is operable to execute an ARA (such as that described above with respect to Fig. 12), but where multiple summation steps in a critical path are combined into a single operation, thus mitigating the computational time and resources necessary to complete the ARA operation. In this manner, at least one carry propagation (CPA) latency is saved in the ARA operation as compared to conventional systems.*

Accordingly, withdrawal of the rejection of claims 1 and 21 is respectfully requested.

Claim 2 has been amended to correct a typographical error.

Claims 2-15 and 17-20 depend from independent claim 1 now believed to be in condition for allowance. Accordingly, withdrawal of the rejection is respectfully requested.

Claim 22 depends from independent claim 21 now believed to be in condition for allowance. Accordingly, withdrawal of the rejection is respectfully requested.

New system claims 23 and 24 and new method claims 25 and 26 are also believed to be allowable based on similar practical application amendments as well as the arguments presented above.

II. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 01-0365, AMDP758US.

Respectfully submitted,
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